FINDINGS OF FACT

THE COMMISSION FINDS:

On December 13, 1996, Ameritech notified the Commission in writing of its intention to refile and extended the time period for review. Ameritech refiled its Statement on January 10, 1997, along with revisions to its tariffs. The Commission issued a second notice on January 16, 1997, requesting comments on Ameritech's compliance filing and issues related to a possible filing by Ameritech for authority to provide in-region interLATA service pursuant to § 271. In this Second Notice and Request for Comments, the Commission stated that these tariff revisions will not become effective until they are reviewed and found in compliance with the first order. It also requested comments on several issues in the first order which the Commission identified as relevant but not fully explored. Those issues were: collocation of remote switching modules (RSMs); availability of dark fiber; shared interoffice transport; recognition of the provider of exchange access; provision of customized routing; restriction of use for terminating services; availability of vertical features; the usage development and implementation charge, and the viability of Ameritech's offering. Comments were due at the Commission and to docket participants by January 27, 1997.

Commission staff developed a memo to summarize the results of its investigation and sent it via courier for receipt by participants in this docket on February 7, 1997. A third request for comments was issued requesting participants to provide comments on the memo by February 14, 1997. The Commission made its oral decision on the issues in the memo at its February 20, 1997, open meeting. This second filing of Ameritech's Statement was found by the Commission to be deficient and it was conditionally rejected; the Commission again allowed an

opportunity for Ameritech to refile in compliance with the Commission's determinations. The findings and conclusions of the February 20, 1997, open meeting were not formalized in a written order but are presented in this order.

As part of the February 20, 1997, decision, the Commission determined it would need additional information in order to be prepared to provide advice to the Federal Communications Commission (FCC) as is a function of state commissions under § 271. The Commission severed eight issues and set them for hearing beginning March 31, 1997. A fourth notice announcing the hearing was issued February 28, 1997. That notice stated that an additional issue may be added to the hearing; namely the issue of whether or not the Ameritech Operations Support Systems (OSS) and electronic data interchange (EDI) interfaces were "tested and operational" in compliance with the Commission's first order.

Those eight issues were as follow and will be addressed in this order in the places noted below.

1. Whether the equipment that can be collocated in Ameritech central offices should be limited to multiplexing and line concentration equipment, or whether competitors should be allowed to collocate switching equipment. *(Addressed in vi. Unbundled Local Switching, issue 5)*

2. The circumstances under which access charges accrue to Ameritech, and under what circumstances they accrue to the new entrant, if the new entrant is purchasing unbundled local loops and unbundled local switching. (A staff white paper, attached to the notice, provided some details on these issues.) Testimony also addressed calls routed over shared transport, special cases such as 800/WATS service, and whether the call detail provided with unbundled local switching is sufficient to allow competitors to bill access charges. *(Addressed in vi. Unbundled Local Switching, issue 6)*

3. The cost support and reasonableness of Ameritech's Usage Development and Implementation Charge. Note that this was the only cost study

on which the Commission had not already ruled. *(Addressed in vi. Unbundled Local Switching, issue 7)*

4. The viability of Ameritech's unbundled service offerings. Discussion of this issue is limited to discussion of viability of the rates already approved by the Commission. The Commission did not intend this issue to be used to reopen the cost studies used to price unbundled services. *(Not addressed in this order, will be addressed after Ameritech files a future Statement in compliance with the requirements herein.)*

5. The extent and completeness of performance benchmarks and parity reports to be provided by Ameritech. *(Not addressed in this order, will be addressed after Ameritech files a future Statement in compliance with the requirements herein.)*

6. The procedures under which Ameritech will modify its Operational Support Systems interface, the procedures for notifying users of impending changes in the interface, and the extent to which users will have input into the modification process. *(Addressed in ii. Nondiscriminatory Access to Unbundled Elements, issue 2)*

7. Other factual issues related to a potential filing by Ameritech for interLATA relief under § 271, such as the extent to which competitors are serving residential customers. (Legal issues regarding the Track A/Track B question, such as the meaning of "predominantly," were not included in testimony.) *(Not addressed in this order; will be addressed after Ameritech files a future Statement in compliance with the requirements herein.)*

8. The criteria the Commission should use when advising the FCC on whether the Ameritech filing is "in the public interest." *(Not addressed in this order; will be addressed after Ameritech files a future Statement in compliance with the requirements herein.)*

Ameritech refiled its Statement on March 3, 1997. That third filing was incomplete. The filing was supplemented with subsequent tariff filings, the last of which was submitted March 26, 1997. The Commission issued a Fifth Notice and Request for Comments, which was mailed on March 28, 1997. In this Notice, the Commission made clear that these tariff revisions would not become effective until they are reviewed and found in compliance with the first order and its oral

decision given at its February 20, 1997, open meeting. Comments were due to the Commission by April 9, 1997.

An amended notice of hearing was issued on March 10, 1997, via facsimile to the parties, adding the issue of whether or not Ameritech OSS interfaces are tested and operational for hearing. This OSS issue and issue number six were heard on March 31, 1997, and April 1, 1997. All three Commissioners were present for this hearing. The Commissioners heard oral argument on the OSS issues on April 2, 1997, and delivered their oral decision on April 3, 1997. The results of that oral decision are reflected in this order.

For the issues addressed in this order, including all but issues 7 and 8 of the issues addressed at hearing on April 2 and 3, 1997, staff was directed to draft a proposed order and circulate it for comment by the parties in lieu of reply comments or briefs. The Commission reviewed the draft order, hearing record, and comments, and its decisions are reflected in this second order.

The notices in this docket stated the Commission did not intend for the tariffs submitted pursuant to its first order, and subsequent decisions in this docket, to go into effect until another order was issued. Nevertheless, standard tariff filing processes were used to handle these tariff submissions and they were placed on file. Ameritech thus has allowed some customers to purchase off these revised tariffs. Allowing customers to purchase from these tariffs does not appear to have harmed any customer. During the compliance process, Ameritech has issued revised tariffs that have, over time, come closer and closer to what is required under the 1996 Telecommunications Act. The rates, terms and conditions in each subsequent tariff became more advantageous to the CLECs, so they benefited from the processing error. No corrective action is

required or desirable to address these benign mistakes. What is now clear from this order, however, is that not all tariffs on file are in compliance with the Commission's first order and further decisions in this docket.

Ameritech's tariffs as filed in association with its Statement have been reviewed and, other than where specific tariff deficiencies are identified, the tariffs on file have been found to be in compliance with this Commission's first order and its February 20, 1997, oral decision. Except where a deficiency or outstanding concern for review is specifically identified in this order, the tariffs submitted March 3, 1997, under Amendment No. 4287 (which contains a complete set of the resale, unbundling, interconnection and pole attachment tariffs at that time) and revised though Amendment Nos. 4298, 4302, 4303, 4310, and 4311, are in compliance and acceptable as the basis for filing another Statement. Tariff revisions to correct the identified deficiencies or, as appropriate, to address an outstanding concern, must be submitted for filing within 14 days of the effective date of this order.

Section 271 Issues of the Telecommunications Act of 1996

The Act states that Ameritech Wisconsin (Ameritech) may not offer in-region interLATA services in Wisconsin except as provided in § 271(c)(1) of the Act. Specifically, § 271(d) allows Ameritech to apply to the Federal Communications Commission (FCC) at any time for authority to provide in-region, originating interLATA service in Wisconsin. The FCC must issue its decision on such an application within 90 days.

The balancing factor under the Act for Ameritech's entry into in-region interLATA service is for Ameritech to open access to its network and services to allow competitors to

provide service in its local exchange service territory. Under § 271(c)(1), Ameritech has two means of qualifying to provide interLATA service, generally referred to as Track A and Track B. Track A relies on the presence of a facilities-based competitor providing local service to residential and business customers predominantly over its own facilities under the terms of a Commission-approved interconnection agreement. Track B relies on the availability of interconnection under a statement of generally available terms and conditions (Statement) for interconnection.

Track B requires that access and interconnection offered pursuant to a Statement must meet the requirements of § 271(c)(2)(B); the competitive checklist (Checklist). The Checklist has 14 items which are: (i) local carrier interconnection, (ii) nondiscriminatory access to network elements, (iii) nondiscriminatory access to poles, ducts, conduits, and rights-of-way, (iv) unbundled local loop transmission, (v) unbundled local transport, (vi) unbundled local switching, (vii) nondiscriminatory access to 9-1-1, directory assistance and operator services, (viii) white pages listings, (ix) nondiscriminatory access to telephone numbers, (x) nondiscriminatory access to databases and signaling for call routing, (xi) interim number portability, (xii) access to services and information to implement local dialing parity, (xiii) reciprocal compensation arrangements, and (xiv) telecommunications services available for resale.

The Commission may not approve Ameritech's Statement unless it complies with § 252(d) pricing standards, § 251 interconnection standards, and non-conflicting state requirements. As required by the Act, rules were promulgated by the FCC in its Interconnection Order in CC Docket No. 96-98 to set the § 251 interconnection standards and the § 252(d)

pricing standards. The U.S. Court of Appeals for the 8th Circuit stayed the operation and effect of the pricing provisions and the "pick and choose" rule pending its final determination of the issues raised by the pending petitions for judicial review of the FCC Interconnection order. Notwithstanding the stay, it is the option of this Commission to consider the decisions of the FCC in its deliberations for this review of pricing, terms and conditions for local competition under the Act. Therefore, in this investigation, the Commission has given due weight to the provisions of the Interconnection Order, without regard to any position this Commission may argue regarding judicial review of that Order. As allowed by § 252(f)(2), this state review of Ameritech's Statement was also based on the order of this Commission, dated July 3, 1996, in docket 05-TI-138, that set standards for local exchange service competition in Wisconsin.

The FCC, pursuant to § 271(d)(2)(B), is required to consult with state commissions after a Bell operating company applies for authority to provide in-region, originating interLATA service. The FCC must issue its decision on such an application within 90 days. The Commission has in this docket also gathered information to share in consultation with the FCC pursuant to § 271(d)((2)(B). When performing in its consultative role to the FCC, this Commission will consider the additional analysis of future filings to comply with this order as well as any other investigations deemed necessary to fulfill its public interest responsibilities. In this consultation, the Commission will inform the FCC regarding whether or not it believes an application by Ameritech for in-region interLATA service should be granted by the FCC pursuant to § 271. The Commission in this order is not adding any conclusions regarding this future consultation to those stated in its first order in this docket.

In that first order the Commission determined that it found purpose in Ameritech seeking approval of its Statement and that it could not foreclose the option of pursuit of a Track B filing by Ameritech. It concluded that to successfully apply to the FCC per Track B, Ameritech will need to met two conditions. The first condition is that "Track A" is not available. The second condition is that Ameritech must have filed a Statement which has been approved or allowed to take effect by this Commission.

The Commission in its first order recommends that the FCC not allow a Track B filing until competitors with interconnection agreements have had a reasonable opportunity to deploy facilities and begin serving customers. On the other hand, it is not reasonable to hold Ameritech hostage to the deployment schedule of its competitors, if those competitors choose to significantly delay deployment. The above examples demonstrate that a decision regarding whether Track A is required or Track B is allowed should be made on a case-by-case basis.

Whether this Commission will advise the FCC that a Track A or Track B filing is appropriate and whether that filing meets the 14 points of the competitive checklist will be determined, based on the specific circumstances at that time, when the FCC consults this Commission requesting that advice. This order provides direction to Ameritech for achieving approval of a Statement. Like the first order in this docket, this order does not represent the Commission's final advice to the FCC on other substantial issues regarding a request for interLATA service authority. Ultimately the advisory role of this Commission under § 271(d)(2)(B) will be based on all the information that it has when the FCC requests consultation.

Application of Wisconsin Law

In review of the Statement, this Commission is not precluded from establishing or enforcing other requirements of state law per § 252(e)(3) as long as such law is not in conflict with the intent of the Act. In the first order, the Commission addressed application of s. 196.19, Wis. Stats., requirement to file tariffs; ss. 196.204(5)(a) and (6)(d), Wis. Stats.; imputation requirement; and requirements of the order in the local competition docket, 05-TI-138. In this order the Commission also addressed application of s. 133.01, Wis. Stats., regarding its requirement to promote competition to the maximum extent possible.

The Commission found it reasonable under Wisconsin law to require:

- that all rates, terms and conditions must be included in tariffs in order to be considered generally available in Wisconsin.
- that parity reporting and performance benchmarks must be incorporated in tariffs
- that prices must pass an imputation test per ss. 196.204(5) and (6), Wis. Stats.
- a specific process in which technical and operational issues will be resolved.

Compliance Review

The following discussion is organized in order of the 14 points of the competitive Checklist per § 271(c)(2)(B) and under those points, according to the issues addressed in the first order. Each section begins with a quote in italics of the revisions or adjustments required by the first order in this docket.

Issues that were completely resolved with the first order are noted (in italics) as "No adjustment is required on this issue in the first order." In addition, the discussion of unbundled

transport and unbundled switching includes discussion of the issues the Commission added for further investigation in its first order in this docket. Any additional requirements added since the first order are presented and supported herein.

i. Local Carrier Interconnection

1. *All rates, terms, and conditions of interconnection must be included in tariffs.*

Ameritech's January 10, 1997, Statement did not include all rates, terms, and conditions of interconnection in tariffs. Ameritech's tariffs refiled on March 3, 1997, in support of its Statement, generally include all necessary rates, terms, and conditions in tariffs. Exceptions to this general finding are noted in this second order.

2. *Ameritech's offering must clearly state that indirect interconnection will be allowed.*

Ameritech's January 10, 1997, Statement included this offering, but it was not reflected in tariffs. Ameritech's filing of March 3, 1997, included this offering in tariffs.

3. *Ameritech's offering must be revised to include the explanation that disputes regarding technical and operational matters will be referred to the Commission staff for review. Staff is allowed to refer such an issue to the Technical Forum for advice before issuing a determination or presenting the matter to the Commission. Staff determinations may be appealed to the Commission.*

Ameritech's January 10, 1997, Statement included this offering, but it was not reflected in tariffs. Ameritech's filing of March 3, 1997, included this offering in tariffs.

4. Ameritech's offering must state that two-way trunking will be available upon request for local interconnection.

Ameritech's January 10, 1997, Statement included this offering, but it was not reflected in tariffs. Ameritech's filing of March 3, 1997, included this offering in tariffs.

5. No adjustment is required on this issue in the first order..

6. No adjustment is required on this issue in the first order.

7. Ameritech's offering must be revised to make the implementation team an option available at the request of interconnecting companies.

Ameritech's January 10, 1997, Statement included this offering, but it was not reflected in tariffs. Ameritech's filing of March 3, 1997, included this change in tariffs.

ii. Nondiscriminatory Access to Unbundled Elements

1. All terms and conditions of interconnection and unbundled elements must be included in tariffs.

Ameritech's March 3, 1997, Statement included all necessary terms and conditions in tariffs unless specifically identified as lacking herein.

Operations Support Systems

2. All operations support systems and electronic interfaces must be tested and operational before they are acceptable for tariffing.

This issue was considered in the hearing held in this docket. Testimony was heard on March 31, 1997, and April 1, 1997. Oral argument was heard on April 2, 1997.

The Commission finds that Ameritech's Operations Support Systems (OSS) are not tested and operational. The following is a summary of the legal requirements considered in making this decision. In a review of a Statement filed under § 252(f)(1), a state commission may not approve such a statement unless it complies with § 251 and the regulations thereunder. Under § 251(c)(3), local exchange carriers (LECs) are required to provide access to unbundled network elements under rates, terms, and conditions that are just, reasonable and nondiscriminatory, and an incumbent LEC must provide unbundled elements in a manner that allows requesting carriers to combine such elements to provide such telecommunications service. In addition, per § 251(c)(4), incumbent LECs are required to offer for resale any telecommunications service and may not impose on the offerings unreasonable or discriminatory conditions or limitations. Regulations adopted pursuant to these sections of the Act include the FCC's interconnection order, CC Docket No. 96-98 (Interconnection Order). The following are relevant quotes from the rules promulgated by the Interconnection Order concerning OSS:

> 47 CFR **§ 51.313 Just and reasonable and nondiscriminatory terms and conditions for the provision of unbundled network elements.**
>
> (a) The terms and conditions pursuant to which an incumbent LEC provides access to unbundled network elements shall be offered equally to all requesting telecommunications carriers.
>
> (b) Where applicable, the terms and conditions pursuant to which an incumbent LEC offers to provide access to unbundled network elements, including but not limited to, the time within which the incumbent LEC provisions such access to unbundled network elements, shall, at a minimum, be not less favorable to the requesting carrier than the terms and conditions under which the incumbent LEC provides such elements to itself.
>
> (c) An incumbent LEC must provide a carrier purchasing access to unbundled network elements with the pre-ordering, ordering, provisioning, maintenance and repair, and billing functions of the incumbent LEC's operations support systems.

Examples of narrative supporting regulations regarding the provision of unbundled network elements on a nondiscriminatory basis are included in ¶¶516, 517, 518, 522, and 525 of the Interconnection Order. In establishing these regulations, the FCC determined that OSS are network elements and must be unbundled upon request and are subject to the nondiscriminatory access requirements. Specifically ¶518 states:

> Much of the information maintained by these systems is critical to the ability of other carriers to compete with incumbent LECs using unbundled network elements or resold services. Without access to review, *inter alia*, available telephone numbers, service interval information, and maintenance histories, competing carriers would operate at a significant disadvantage with respect to the incumbent. Other information, such as the facilities and services assigned to a particular customer, is necessary to a competing carrier's ability to provision and offer competing services to incumbent LEC's customers. Finally, if competing carriers are unable to perform the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing for network elements and resale services in substantially the same manner that an incumbent can for itself, competing carriers will be severely disadvantaged, if not precluded altogether, from fairly competing. Thus providing nondiscriminatory access to these support system functions, which include access to information such systems contain, is vital to creating opportunities for meaningful competition.

In addition, the FCC's Second Order on Reconsideration (of its Interconnection Order) concluded that to comply with its obligation to offer access to OSS functions, an incumbent LEC must, at a minimum, establish and make known to requesting carriers the interface design specifications that the incumbent LEC will use to provide access to OSS functions. The FCC concludes that information regarding interface design specifications is critical to enable competing carriers to modify their existing systems and procedures or develop new systems to use these interfaces to obtain access to the incumbent LEC's OSS functions. The FCC declined to condition the requirement to provide access to OSS functions upon the creation of national standards.

Accordingly, the Commission finds that to meet its stated "tested and operational" requirement, Ameritech must provide access to each of the following interfaces: pre-ordering, ordering, provisioning, repair and maintenance, and billing. That access must be nondiscriminatory, meaning in substantially the same time and manner that an incumbent LEC provides OSS functions to itself. Access to the necessary design and operating specifications must be provided to enable CLECs to use the interfaces. The burden of proof is upon Ameritech to show these requirements have been fulfilled. That burden of proof has not been met.

The evidence Ameritech presented at hearing regarding the "tested and operational" OSS requirement consisted of the statements of its employee, Joseph Rogers. Mr. Rogers testified that his conclusions that the systems were fully tested and operational were not based upon first-hand knowledge gained by personal review of the data, but upon statements of employees who worked under his direction. When presented with Ameritech's own trouble logs (Exhibits 4, 7, and 8), obtained through staff data requests, he had no personal knowledge regarding the contents of these reports. For troubles listed on those reports, he admitted he did not know whether the troubles had been corrected. Some of the listed troubles clearly affected the competitors' ability to provide service to their customers.

Troubles existed with the transaction set 865 and the firm order confirmation (FOC). The record identified that if FOCs are not properly issued, double billing errors could occur. In spite of the existence of such type errors, Mr. Roger's staff still advised him that the systems were fully tested and operational, and he relied on this information in preparing his testimony. Based on the evidence presented by Ameritech, the Commission could not conclude the systems were tested and operational.

Mr. Rogers identified that the interfaces were designed such that access would be provided to the OSS through the interfaces in a similar manner to that which is provided directly to Ameritech customer service representatives. However, evidence was lacking that in fact the interfaces perform in a manner similar to that provided to Ameritech customer service representatives. The AT&T order testing, which took place from October 7, 1996, to November 26, 1996, showed 67 percent of the completed transactions were processed manually. AT&T demonstrated that it had requested in writing information regarding all the causes of manual processing and had been denied that information by Ameritech. AT&T demonstrated it was only able to obtain such information through the regulatory process afforded by this proceeding.

Staff data requests and staff analysis demonstrated that manual intervention in orders resulted from causes on both the Ameritech and the CLEC sides of the interface. Staff analysis demonstrated that manual intervention was more likely than fully electronic processing to result in a missed due date. Staff analysis of error messages over time, showed new types of error messages on the Ameritech side of the interface were continuing to occur through the end of that analysis, February 26, 1997. The Commission concludes that, according to the data through February 26, 1997, the ordering interface was not providing predictable, reliable results. Therefore, the Commission concludes Ameritech's electronic ordering interface does not now provide ordering in substantially the same time and manner that it provides ordering to itself.

Also at issue was whether Ameritech would process transactions for competitors in substantially the same time and manner as those processed within Ameritech itself. An analysis of due dates met was presented, but it did not include a comparison measure for Ameritech's

own due dates met. In addition, Ameritech's measure of due dates met was inaccurate as it did not consider overdue orders still pending as having missed due dates. An analysis of due dates not met should include overdue pending orders as a due date not met.

Ameritech was not able to provide comparisons to Ameritech customer service representatives for any of the pre-ordering functions. Significant differences in pre-ordering processing time would be service affecting differences as end-user customers make their requests for service by telephone and expect to receive telephone numbers and due dates while waiting on the line. In addition, the lack of information on the interface for reporting repair or maintenance leaves uncertainty regarding the quality of service provided to CLEC end-user customers compared to that provided to Ameritech's own end-user customers.

The following additional deficiencies were identified through the hearing process. Ameritech did not present evidence that the maintenance and repair interface would operate as expected. In the case where no CLEC has chosen to process live transactions, simulated transactions at significant volumes would need to be presented to demonstrate the interface is operational. Such information was not presented. The specification information provided to enable competing providers to use the ordering and billing interfaces was not complete for unbundled network elements. Universal service ordering codes (USOCs) had not yet been established for certain unbundled network elements or for combining unbundled network elements. Without such USOCs, CLECs do not have all the necessary information to place orders for unbundled network elements.

As the evidence in this docket, the federal legislation and the FCC orders make clear, Ameritech's OSS systems are critical to a competitor's success. An inability to use those

systems could prevent the competitor from providing timely service to its customers. For that reason, the Commission will continue to require Ameritech to demonstrate that its OSS interfaces are fully functional and usable – that they are tested and operational, and that competitors have full specifications and information to enable the competitors to write software to work with those interfaces – before the Commission can approve a Statement.

The Commission is also concerned that the OSS interfaces remain useful in the future, since these OSS interfaces will continue to be critical to the competitors' ability to provide service. Ameritech will have to, over time, revise and update these interfaces to incorporate changes and upgrades in its own systems; the systems to which the OSSs provide access. However, when these changes and updates are implemented, the competitors must rewrite their own order taking, processing and tracking software to work with the revised interfaces (and debug the new software, and retrain their service representatives, etc.). As was described, and unrebutted, in the hearing, Ameritech could potentially release upgrades and changes frequently enough to prevent the competitors from ever having fully functional software for handling service orders or serving their customers. It is critical that Ameritech have a change management process, defined and in place, to prevent this from happening, even unintentionally.

Ameritech did not present any evidence that it had a change management system complete and in place. It is reasonable to require that such a system be completed and in place before the Commission approves the Statement. To meet this requirement, the change management system must: (1) provide sufficient notice of impending changes to allow users to modify and debug their own systems, and to retrain their service representatives, (2) bundle small and incremental changes into batched upgrades, thus limiting the number of rewrites users

must undertake and (3) allow users input into the scheduling of upgrades, and allow production users an opportunity to object to Ameritech's implementation of releases which are not backwards compatible.

The Commission has special concerns about upgrades that are not backwards compatible--that is, that will not allow software written to the previous versions of the specifications to function. If a CLEC is using the OSS interfaces to place orders and to serve its customers, and Ameritech implements a non-backwards-compatible upgrade, the CLEC must upgrade or it will be unable to process orders or serve its customers. If the CLEC cannot complete the rewrite of its systems, and/or the training of its service representatives on the rewritten systems, it will be out of business until it completes the tasks. Given that the timing of non-backwards-compatible interfaces can be, quite literally, a matter of survival for the competitors, it is reasonable to give them a strong voice in determining the timing of such upgrades.

Consider the example frequently used by Joe Rogers, who testified for Ameritech on OSS issues, of Ameritech offering "left handed call waiting." Assume an upgrade to the OSS interface would be necessary to allow CLECs to order left-handed call waiting; that a new field must be used, and contain either an "R" for standard call waiting or an "L" for the left-handed version. A backward-compatible upgrade would assume that, if the provider did not enter anything in the field, the order was for regular call waiting. Thus CLECs using software written to older versions of the Ameritech specification, which did not use the L/R field, could continue to place orders, but would be unable to order left-handed call waiting. On the other hand, an upgrade which was not backward compatible would reject all orders which did not have that field

filed in with either an "L" or and "R." In such cases, CLECs who had not upgraded to the new standard could not place any orders, not even for regular call waiting.

If left-handed call waiting is a service that customers want, then the CLECs have a strong incentive to upgrade to the versions of the OSS interfaces that allow it to order the service so they do not lose customers or potential customers who want left-handed call waiting. On the other hand, if an upgrade does not provide a CLEC with any desirable additional functionality, efficiency or the ability to order new services, then the CLEC will have no reason to incur the costs of upgrading to a newer version. A CLEC would not choose to pay for new software systems if it gains no benefit from the upgrade, and it is not reasonable for the Ameritech OSS upgrades to force it to incur such expenses unnecessarily.

Ameritech has expressed concerns that the CLECs should not have the ability to delay new upgrades for strategic reasons. CLECs would only have an incentive to object to an upgrade if it were not backwards compatible, and if the cost of implementing the upgrade exceeded any possible benefit the CLEC could obtain from that upgrade. However, it is reasonable to expect that Ameritech Industry Information Services (AIIS), the business group that administers the interfaces, will continually talk to these CLECs, and be able to reach a compromise in most cases. AIIS representatives have testified that that is their job. If a CLEC gains no benefit for the costs of upgrading, but Ameritech has its own reasons for desiring the upgrade, then Ameritech might have to absorb some of the CLEC's costs for implementing a non-backwards-compatible upgrade, or Ameritech may have to add some functions to the upgrade that the CLEC would value. Alternatively, if some CLECs benefit from an upgrade, but others do not, those benefiting may have to cover the costs of upgrading for those not benefiting. Such arrangements

are routine in competitive marketplaces, where customers are free to choose not to buy upgrades. It is reasonable for this Commission to impose a substitute for this market mechanism and foreclose Ameritech's complete control over both the number and scheduling of non-backwards-compatible upgrades.

Ameritech has suggested that any upgrade which moves towards or implements some or all of a national standard be exempted from the objection process. Several CLECs have testified to the advantages that a single set of interfaces, written to national standards, would produce. Therefore, CLECs should have incentives to implement such upgrades, provided that they do not implement only those portions of the national standard that provide benefits to Ameritech or to a particular subset of competitors. Likewise, competitors might object if Ameritech made the transition to national standards in a number of small, non-backwards compatible steps instead of a single upgrade, thereby requiring CLECs to incur the expense of rewriting, debugging and retraining many times. Therefore, the Commission does not find it reasonable for any non-backwards-compatible upgrades to be exempted from objection, even if they are intended to move towards a national standard.

Objections and appeals should be handled in an expeditious manner so as to limit the impact to the proposed implementation schedule if it is determined to be reasonable. In discussions with Ameritech, staff has discussed several schedules under which appeals to this Commission, even if an initial staff determination were appealed to the Commission, would be handled rapidly enough to maintain the initial roll-out schedule. A reasonable roll-out schedule would only be delayed if the upgrade proved highly controversial, with enough users on each side

to require a hearing before the Commission could issue its determination. Even in that event, the appeal may be concluded in time to meet the original roll-out schedule.

Ameritech raised in comments the question of whether it should be allowed to follow the FCC rules, as contained in 47 CFR §§ 50. 307 through 50.335, for changing OSS interfaces. The Commission agrees that the FCC rules would adequately meet the requirements listed above, if Ameritech stipulates to several clarifications on uncertainties in how these rules apply to OSS interfaces. The FCC rules generally cover notification to competitors of network upgrades and introduction of new services. OSSs are only included by peripheral mention. The rules are written to address purchases of hardware and redesigns of networks, and do not work as well for OSSs and computer interfaces.

Ameritech could adopt the FCC mechanism in its change management plan, and that plan would comply with the requirements listed above and in Appendix B, provided that Ameritech states:

1. That it agrees that the "telephone exchange service providers" which will be notified of any proposed changes to an OSS interface includes all users of that interface.

2. That it will notify all such users of all changes, whether or not it uses the short-term notice procedures.

3. That it considers all changes to its OSSs to come under the FCC rules.

4. That the make/buy point is when, and therefore notice would not occur until, all technical specifications of the new interface are final.

5. That the notice issued by Ameritech include a description of the relevant technical specifications and/or standards complete enough to give interface users enough information to assess how the change will affect them.

6. That, if the FCC decides it does not have, or waives, jurisdiction over an objection filed by a particular type of interface user or regarding a non-backwards-compatible OSS change, Ameritech agrees that any such disputes shall fall under the jurisdiction of the Public Service Commission of Wisconsin, and that a change management system which complies with the above rules will apply to such users.

The Commission acknowledges that Ameritech is working very hard to accomplish the task of providing access to its OSS. This is a brand new undertaking for local exchange carriers. Ameritech has been proactive in developing and using industry standards. However, Ameritech must finish the task before the Commission can approve its Statement. Competing providers need assurances of the stability and readiness for use of Ameritech systems before investing in facilities and committing resources to applying these interfaces in practice. The Commission finds it will need to revisit the issue of whether Ameritech's OSS are tested and operational in any future filing of a Statement. Proper review has required a significant commitment of Commission resources. Ameritech has filed its complete Statement three times already while access to its OSS was not yet tested and operational. Accordingly, it is reasonable for the Commission to establish a threshold set of data that must be filed before Ameritech can file another Statement with the Commission. Ameritech may refile for approval of its Statement when it is confident that those thresholds are met.

Appendix B to this order enumerates the data that must be filed. Ameritech must gather all the information listed therein and submit it to the Commission along with any future filing requesting approval of the Statement. Any item listed in Appendix B that is not supplied with a filing of the Statement is sufficient grounds for rejection of the Statement. Further, any significant revision of the data supplied pursuant to Appendix B constitutes a refiling of the

Statement and will be treated as a new application for approval of a Statement for purposes of the 60-day federal timeline for review.

In addition, the Commission now finds it appropriate to establish a new order requirement regarding OSS. The first order's requirements stated, "Operations support systems and electronic interfaces must be tested and operational before tariffs are acceptable for filing." The Commission finds the Act and the rules issued thereunder provide sufficient criteria that must be met regarding OSS before a Statement can be approved without having OSS functionality as a prerequisite to tariff filing. Manual systems do exist to process orders and provide other functions to competing LECs. Having tariffs on file that state OSS access is part of the offering of interconnection is important, but not sufficient for approval of a Statement. The full availability of that access on a nondiscriminatory basis, as discussed in these findings, is the necessary prerequisite for approval. Therefore it is reasonable for this Commission to establish a new requirement as follows: Operations support systems must be tested and operational before a Statement will be approved. Those systems must be available on a nondiscriminatory basis.

3. Performance benchmarks must be included in unbundled element offerings. Ameritech's offering must state that issues regarding type, standards, levels, and frequency of performance benchmarks may be referred to the Commission.

In Ameritech's January 10, 1997, and March 3, 1997, filed Statements, Ameritech had added language to the Statement to address these items. Staff recommended in its comments on these filings that it is appropriate for this language to appear in the Statement rather than the tariff. Tariffs are not generally used to express actual performance standards or dispute processes. Adding these items to the Statement rather than the tariff is acceptable. The

Statement does not, however, yet specify actual performance benchmarks or parity reports. Lack of finality on these items may not in and of itself be sufficient reason to reject a Statement, although significant inadequacies in performance benchmarks and parity reports would be sufficient. The Statement under review is still too vague to meet the Commission's performance benchmark requirement.

4. *Ameritech's offering must state the maximum time interval for provision of service. At the request of any interconnecting party, that time interval may be appealed to the Commission.*

Staff did not find a specific reference to maximum time intervals in Ameritech's January 10, 1997, or March 3, 1997, Statements. Ameritech may consider it included in the reference to performance benchmarks discussed above. The tariffs should include a general reference to the maximum time interval for provision of a service. The specific time intervals need not be included in the tariffs, however, if they are not, they must be included in the Statement language.

5. *(a) Ameritech must revise its rates for unbundled elements to reflect the appropriate economic lives as set forth in the Final Order in docket 05-DT-101, dated September 15, 1995.*

In Ameritech's Statement refiled on January 10, 1997, Ameritech contested this requirement and instead filed an opinion by the law firm of Foley and Lardner, which was supported by a paper of an economist, Dr. Debra Aron. In this Commission's February 20, 1997, oral decision, the Commission upheld this order requirement. The March 3, 1997, refiled Statement is in compliance with this order requirement.

The opinion filed by the law firm of Foley and Lardner asserted the docket 05-DT-101 order had not taken into consideration the sea of changes in telecommunications markets and would, therefore, be improper and unreasonable to use in setting unbundled rates. It also cited the pricing standard in § 252(d)(A)(i), which states that cost is to be "determined without reference to a rate-of-return or other rate-based proceeding."

The order in docket 05-DT-101 was issued to comply with the requirements of s. 196.09(9), Wis. Stats. That statute was created by 1993 Wisconsin Act 496 (the Wisconsin Act), the landmark legislation which refocused telecommunications regulation in Wisconsin to promote competition and opened telecommunications markets to competition. The intent of the Wisconsin Act closely matches that of the federal Act. The order in docket 05-DT-101 was based upon analysis of a telecommunications market that would be opened to competition. In s. 196.09(9)(a), Wis. Stats., the depreciation ranges are to be used by telecommunications utilities for public utility purposes. Therefore, reference to this section for analysis of depreciation lives used in a TELRIC study is not the equivalent to a reference to depreciation lives set in a rate-of-return proceeding. The Wisconsin Act specifically provided price cap plans for electing telecommunications utilities. Ameritech selected price regulation at its earliest opportunity. While this range of rates may be applied in rate-of-return situations, the range is applicable to all public utilities, including those under price cap or other alternative regulatory plans.

Dr. Aron asserted that the depreciation ranges determined in docket 05-DT-101 are inconsistent with the idealized assumptions of forward-looking cost models. She claims the range of depreciation rates were derived from historical observations of networks. However, the depreciation ranges in the order in docket 05-DT-101 do reflect changing technologies and